



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,679	12/05/2003	Jerry R. Colca	01012/1	9803
7590	11/15/2005			
Pharmacia Corporation Global Patent Department P. O. Box 1027 Mail Zone MC5 St. Louis, MO 63141			EXAMINER CHANDRA, GYAN	
			ART UNIT 1646	PAPER NUMBER
DATE MAILED: 11/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/728,679	<b>Applicant(s)</b> COLCA ET AL.	
	<b>Examiner</b> Gyan Chandra	<b>Art Unit</b> 1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-15 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 1-7, drawn to a method of identifying a compound for the treatment, prevention or diagnosis of a mitoNEET associated dysfunctional disease or condition comprising the steps of determining a direct interaction of compound with mitoNEET.

Group 2, claim(s) 8-10, drawn to a method of treating or preventing a mitoNEET associated a metabolic dysfunctional disease or condition comprising administering a compound that directly interacts with mitoNEET.

Group 3, claim(s) 11, drawn to an antibody that immunospecifically binds the mitoNEET polypeptide.

Group 4, claim(s) 12, drawn to a method of detecting a differentially expressed gene correlated with a mitoNEET associated metabolic dysfunctional disease or condition of a mammalian cell.

Group 5, claim(s) 13, drawn to a method of monitoring the progression of a metabolic disorder in a patient comprising detecting the expression of a marker at a first point in time in a patient and then compare the expression of the marker at a subsequent point in time.

Group 6, claim(s) 14, drawn to a method of assessing the efficacy of a test compound for correcting the metabolic disturbance comprising comparing the expression level of a marker in a sample obtained for a patient after administering a test compound with the expression level of the marker in a second sample from the patient without administering the test compound.

Art Unit: 1646

Group 7, claim(s) 15, drawn to a method of selecting a compound for treating, preventing or diagnosing a mitoNEET associated metabolic dysfunctional disease or condition in a patient comprising (i) obtaining a sample cells from a patient, (ii) exposing these cells against plurality of test compounds, (iii) comparing expression level of a marker, and (iv) selecting a test compound that alters the level of a marker expression most.

The inventions listed as Groups 1-7 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Group 1, recites technical feature of identifying a compound for the treatment, prevention or diagnosis of a mitoNEET associated dysfunctional disease or condition comprising the steps of determining a direct interaction of compound with mitoNEET, which is not required for the methods of Groups 2, and 4-7.

Group 2, recites technical feature of treating or preventing a mitoNEET associated a metabolic dysfunctional disease or condition comprising administering a compound that directly interacts with mitoNEET, which is not required for the methods of Groups 1, and 4-7.

Group 3, recites technical feature of an antibody that immunospecifically binds the mitoNEET polypeptide.

Group 4, recites technical feature of detecting a differentially expressed gene correlated with a mitoNEET associated metabolic dysfunctional disease or condition of a mammalian cell, which is not required for the methods of Groups 1-2, and 5-7.

Group 5, recites technical feature of monitoring the progression of a metabolic disorder in a patient comprising detecting the expression of a marker at a first point in time in a patient and then compare the expression of the marker at a subsequent point in time, which is not required for the methods of Groups 1-2, 4, and 6-7.

Group 6, recites technical feature of assessing the efficacy of a test compound for correcting the metabolic disturbance comprising comparing the expression level of a marker in a sample obtained for a patient after administering a test compound with the expression level of the marker in a second sample from the patient without administering the test compound, which is not required for the methods of Groups 1-2, 4-5, and 7.

Group 7, recites technical feature of selecting a compound for treating, preventing or diagnosing a mitoNEET associated metabolic dysfunctional

Art Unit: 1646

disease or condition in a patient comprising (i) obtaining a sample cells from a patient, (ii) exposing these cells against plurality of test compounds, (iii) comparing expression level of a marker, and (iv) selecting a test compound that alters the level of a marker expression most, which is not required for the methods of Groups 1-2, 4-6.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 1646

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gyan Chandra whose telephone number is (571) 272-2922. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa can be reached on (571) 272-0829. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gyan Chandra, Ph.D.  
Art Unit 1646  
09 November 2005  
Fax: 571-273-2922

  
JANET L. ANDRES  
SUPERVISORY PATENT EXAMINER